

REMARKS

This Application has been carefully reviewed in light of the Final Office Action sent electronically on July 14, 2009. At the time of the Final Office Action, Claims 12, 14-17, 19, 37, 39-50, 52, and 55-57 were pending in this Application. Claims 12, 14-17, 19, 37, 39-50, 52, and 55-57 were rejected in the Final Office Action. Applicants respectfully request reconsideration and favorable action in this case in light of the remarks presented below.

Rejections under 35 U.S.C. § 102

Claims 12, 14-17, 19, 37, 39-45, 49, and 50 were rejected by the Examiner under 35 U.S.C. §102(e) as being anticipated by U.S. Patent 7,224,906 issued to Pak Shing Cho et al. (“*Cho*”).

Applicants respectfully traverse this rejection on the ground that *Cho* is not prior art. *Cho* was filed on February 28, 2002. The present application was filed January 18, 2002, before the filing date of *Cho*. Furthermore, although *Cho* includes priority claims to earlier-filed applications as a continuation-in-part application, the subject matter of *Cho* relied upon by the Office Action to reject the claims of the present application (e.g., Figure 24) does not appear to be included in any of these earlier-filed applications and the Office Action has not provided any showing of a similar disclosure in the earlier-filed applications. As such, *Cho* is not prior art to the present application under 35 U.S.C. § 102(e) or under any other provision of the patent laws. For at least this reason, Applicants respectfully request reconsideration and allowance of all pending claims, which are all rejected in light of *Cho*.

Furthermore, regardless of its status as prior art, *Cho* does not disclose each and every limitation of the claims of the present application. “A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a

single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 U.S.P.Q.2d 1051, 1053 (Fed. Cir. 1987). Furthermore, “the identical invention must be shown in as complete detail as is contained in the ... claim.” *Richardson v. Suzuki Motor Co. Ltd.*, 868 F.2d 1226, 1236, 9 U.S.P.Q.2d 1913, 1920 (Fed. Cir. 1989). Furthermore, “[t]o establish inherency, the extrinsic evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.” M.P.E.P. § 2112; *See In re Robertson*, 49 U.S.P.Q.2d 1949, 1150-51 (Fed. Cir. 1999). “In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art.” M.P.E.P. § 2112; *Ex parte Levy*, 17 U.S.P.Q. 1461, 1464 (Bd. Pat. App. & Inter. 1990).

Independent Claim 12 of the present application recites the following limitations:

A method for receiving a signal, comprising:
generating a polarized local signal based on receiver-side feedback;
receiving an ingress traffic signal comprising a first signal and a second signal, the first and second signals having the same wavelength, having different polarizations, and being modulated based on different data;
combining the ingress traffic signal including the first signal and the second signal with the polarized local signal to generate a combined signal;
splitting the combined signal into a first split signal and second split signal using a polarization beam splitter;
detecting the first split signal;
detecting the second split signal; and
converting the detected first split signal and second split signal into intended data streams.

Independent Claim 37 recites similar, although not identical, limitations.

Cho does not disclose each and every one of these limitations. For example, *Cho* does not disclose “receiving an ingress traffic signal comprising a first signal and a second signal, the first and second signals having the same wavelength, having different polarizations, and being modulated based on different data.” For a teaching of this limitation, the Office Action refers to the signal generated by the transmitter 1800 of Figure 8 of *Cho*; however, this figure simply shows and describes a QPSK optical signal transmitter. There is no disclosure of the generation of two signals of the same wavelength having different polarizations.

In addition, *Cho* does not disclose “splitting the combined signal into a first split signal and second split signal using a polarization beam splitter.” For a teaching of this limitation, the Office Action refers to hybrid 302’ of Figure 24 and asserts that this limitation is inherent in hybrid 302’. However, there is no disclosure that the hybrid performs polarization beam splitting. *Cho* only discloses that the hybrid outputs four signals having different phases. There is no disclosure that any polarization splitting is possible with hybrid, much less that it is necessarily present. As noted above, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art. Such a showing has not and cannot be provided based on the disclosure of *Cho*.

For at least these additional reasons (in addition to *Cho* not being prior art), Applicants respectfully request reconsideration and allowance of Claim 12, as well as the claims that depend from Claim 12. In addition, independent Claim 37 includes similar, although not identical limitations, and is allowable for similar reasons. Thus, Applicants also respectfully request reconsideration and allowance of Claim 37, as well as the claims that depend from Claim 37.

Rejections under 35 U.S.C. §103

Claims 46-48 and 52 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Cho*. Claims 55-57 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Cho* in view of U.S. Patent No. 7,136,588 issued to Mohammad N. Islam et al. ("*Islam*").

Dependent Claims 46-48 depend from Claim 37, which is allowable for the reasons provided above. Independent Claim 52 (and thus its dependent Claims 55-57) recites similar, although not identical, limitations as Claims 12 and 37 discussed above. Thus, for the same reasons discussed above with respect to Claims 12 and 37, Applicants respectfully request reconsideration and allowance of Claims 46-48, 52, and 55-57.

CONCLUSION

Applicants have made an earnest effort to place this case in condition for allowance in light of the amendments and remarks set forth above. Applicants respectfully request reconsideration of all pending claims.

Applicants believe there are no fees due at this time; however, the Commissioner is hereby authorized to charge any fees necessary or credit any overpayment to Deposit Account No. 50-2148 of Baker Botts L.L.P.

If there are any matters concerning this Application that may be cleared up in a telephone conversation, please contact Applicants' attorney at 512.322.5470.

Respectfully submitted,

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A handwritten signature in black ink, appearing to read 'B. W. Oaks', written over the printed name.

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